

Application Serial No. 10/633,061
Reply to Office Action of September 30, 2005

REMARKS

The application has been reviewed and revised in light of the Final Office Action mailed on September 30, 2005. Claims 1-30 are currently pending in the application with Claims 1, 12, 18, 21, 23 and 27 being in independent form. The specification has been amended as indicated on page 2 of this paper. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

Allowable Subject Matter

Applicants gratefully acknowledge the allowance of Claims 27-30. Applicants also gratefully acknowledge the allowance of Claims 6, 8, 11, 13, 14, 16, 25 and 26 if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Rejection of Claims 1-5, 7, 9, 10, 12, 15, 17-24 Under 35 U.S.C. §§ 102(e), 103(a)

In the Final Office Action, Claims 1-5, 10, 12, 15 and 18-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,874,690 issued to Lucera et al. ("Lucera et al."); and Claims 7, 9, 17 and 21-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lucera et al. The rejections are respectfully traversed.

Lucera et al. is directed to a *laser-based bar code symbol scanning system having at least one laser-based scan module insert* that is removably disposed within a system housing. The scan module insert includes at least one laser diode, a rotating scanning element, an electric motor that rotates the rotating scanning element, one or more photodetectors for detecting reflected laser light, and analog signal processing circuitry that conditions the electrical signal produced by the one or more photodetectors.

It is respectfully submitted that Lucera et al. does not disclose or suggest imaging-based scanning systems having an imaging engine which is recited by each of Applicants' independent

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claims. It is respectfully submitted that an imaging engine is structurally and functionally different from the laser-based scan module insert of the laser-based scanning system described by Lucera et al.

An imaging engine includes an image sensor, such as a charge-coupled device (CCD), for imaging objects thereon, whereas the laser-based scan module insert described by Lucera et al. includes one or more photodetectors for detecting laser light reflected from a surface. Applicants' disclosure describes the structural and functional differences between imaging-based scanning systems and laser-based scanning systems (see page 2, line 14 to page 4, line 9).

Applicants' disclosure cites U.S. Patent No. 4,251,798 on page 2, line 18 which describes a laser-based scanning system. U.S. Patent No. 4,251,798 states that "Laser light reflected from a bar code symbol pattern is detected by a photodetector mounted in a portable scanning head of a laser scanning system. By selecting appropriate threshold values on the analog signal generated by the photodetector, the analog signal is converted to a series of pulses, each pulse width accurately corresponding to the width of a bar from the scanned pattern." See Abstract.

Applicants' disclosure further cites and incorporates by reference U.S. Provisional Application Serial No. 60/437,959 which describes an optical code reading device having two imaging engines where one imaging engine includes a color image sensor, e.g., a color CCD image sensor, and another imaging engine includes a black and white image sensor, e.g., a black and white CCD image sensor.

In particular, with respect to the Applicants' claims, Lucera et al. does not disclose or suggest a **plug-and-play imaging engine** having an imaging assembly including at least one **image sensor** as recited by Applicants' independent Claim 1. Further, Lucera et al. does not disclose or suggest an optical code reading system for imaging an optical target having an optical

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code reader and a **plug-and-play imaging engine** having structure for removably connecting to the optical code reader as recited by Applicants' Claim 12.

Additionally, with respect to Claim 18, Luccra et al. does not disclose or suggest a method for reading an optical code using an optical code reader having a housing and circuitry therein, where the method includes, inter alia, placing a **plug-and-play imaging engine** having an interface within a form factor of the optical code reader, and activating the optical code reader to generate and propagate at least one control signal to the plug-and-play imaging engine for operating the imaging engine for generating at least one signal output from at least one illuminating device of the imaging engine; and impinging the at least one reflected signal onto an **image sensor**.

Further still, Lucera et al. does not disclose or suggest an optical code reading kit having an optical code reader and at least two **plug-and-play imaging engines** configured and dimensioned for alternative placement within a form factor of the optical code reader as recited by Applicants' Claim 21. Finally, Lucera et al. does not disclose or suggest a method for changing an imaging engine in an optical code reader, where the method includes removing a **first, plug-and-play imaging engine** from the optical code reader, and interfacing a **second, plug-and-play imaging engine** to the optical code reader as recited by Applicants' Claim 23.

Accordingly, it is respectfully submitted that the subject matter recited by Applicants' claims is patentably distinguishable from the disclosure of Luccra et al. Luccra et al. does not disclose or suggest a plug-and-play imaging engine as recited by all of Applicants' independent claims. The laser scan module insert described by Lucera et al. is not a plug-and-play imaging engine as described above.

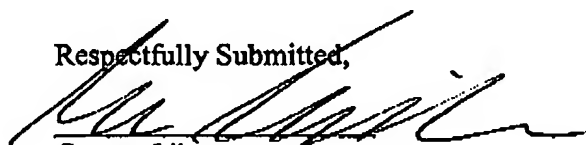
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Accordingly, independent Claims 1, 12, 18, 21 and 23 are believed to be patentably distinct over Lucera et al. Therefore, reconsideration and withdrawal of the rejections are respectfully requested and allowance of independent Claims 1, 12, 18, 21 and 23 is earnestly solicited. Dependent Claims 2-11, 13-17, 19-20, 22 and 24-26 depend from independent Claims 1, 12, 18, 21 and 23, respectively, and are therefore patentable for at least the reasons given above for independent Claims 1, 12, 18, 21 and 23.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that none of the references of record, considered individually or in combination, in whole or in part, disclose or suggest the present invention as claimed. Therefore, all claims now pending in this application, namely Claims 1-30, are now in condition for allowance. Accordingly, early and favorable consideration of this application is respectfully requested. Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, he is respectfully requested to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully Submitted,



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